## **Lung Cancer**



Lung Cancer January 2021

Lung cancer is not a single disease; rather it is a group of cancers that originate in the lung and associated tissues. Lung cancers are divided into three major types: small cell lung cancer (SCLC), non-small lung cancer (NSCLC) and lung carcinoid tumors. Lung cancer accounts for more deaths than any other cancer in men and women.<sup>1</sup>

In Indiana, during 2015, approximately 4,932 residents were diagnosed with lung

Table 1. Burden of Invasive Lung Cancer\* - Indiana, 2011-2015

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Incidence 5,259 70.6 4,932 63.8 Indiana		number of cases per year	100,000 people†	of cases	100,000 people†
Indiana	Indiana	i i			

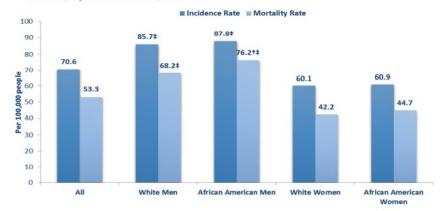
<sup>\*</sup>Includes lung and bronchus cancers combined

Source: Indiana State Cancer Registry. Accessed on July 7, 2017.

#### **Disparities**

Disparities between lung cancer incidence and mortality rates exist between genders and races. In Indiana, during 2011-2015, white and black males had significantly higher incidence and mortality rates when compared to females of the same race. In addition, black males had higher mortality rates when compared to white males (figure 1). <sup>2</sup>

Figure 1. Age-adjusted Lung Cancer Incidence and Mortality Rates in Indiana, by Race and Sex, 2011-2015\*



<sup>\*</sup>Age-adjusted per 100,000 people.

‡Rate among males is significantly higher (P<.05) than rate among females of the same race Source: Indiana State Cancer Registry. Accessed on July 7, 2017.

### **Fast Facts**

- Overall, lung cancer mortality rates are about three times higher for both male and female smokers than for people who never smoked.<sup>3</sup>
- Exposure to radon gas is estimated to be the second-leading cause of lung cancer in the United States.
- Cigarette use causes premature death. Quitting smoking before the age of 40 reduces the risk of dying from smoking-related disease by about 90%.<sup>4</sup>
- In Indiana during 2016, 23.6 percent of adult males and 18.8 percent of adult females reported being current smokers.<sup>4</sup>
- According to the Indiana Cancer Facts and Figures 2015 report, an estimated 50,000 people die from exposure to

### Common Signs and Symptoms of Lung Cancer<sup>1</sup>

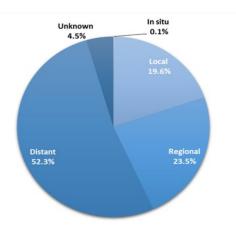
- A cough that does not go away or gets worse.
- Coughing up blood or sputum streaked with blood.
- Chest pain that is worse with deep breathing, coughing or laughing.
- Voice changes or hoarseness.

<sup>†</sup>Age-adjusted rates per 100,000 people.

<sup>†</sup>Significantly elevated (P<.05) compared to white males

#### **What Factors Influence Lung Cancer Survival?**

- Lung cancer is often diagnosed at a later stage, which negatively impacts a person's odds of survival. The five-year survival rate is highest (55 percent) if the lung cancer is diagnosed when it is confined entirely within the lung (i.e., localized). <sup>1</sup> However, in Indiana, during 2011-2015, only 19.6 percent of lung cancers were diagnosed during this stage (Figure 2).
- The five-year survival rate is different for SCLC, NSCLC and lung carcinoid tumor. For SCLC, the five-year survival rate is 7 percent. The five-year survival rate for NSCLC is higher at 21 percent. According to the American Cancer Society, the five-year survival rate for lung carcinoid tumor varies by type and stage. In general, the five-year survival rate ranges from 93 percent for Stage I diagnoses to 57 percent for Stage IV diagnoses.
- Treatment options are determined by the type (SCLC, NSCLC or lung carcinoid tumor) and stage of cancer and



## Figure 2. Percent of Lung Cancer Cases Diagnosed During Each Stage\* - Indiana, 2011-2015

includes invasive and in situ cases

Source: Indiana State Cancer Registry

# Can Lung Cancer Be Detected Early?

The United States Preventive Services Task Force recommends annual screening for lung cancer with low dose computed tomography in adults aged 55 to 80 years who have a 30-pack-per-year smoking history and currently smoke, or who have quit within the past 15 years. Screening should be discontinued once a person has not smoked for 15 years, or develops a health problem that substantially limits life expectancy or the ability or willingness to have

## Get Involved: Join the Indiana Cancer Consortium (ICC)

- The ICC is a statewide network of over 100 agencies, including the Indiana State Department of Health.
- ICC seeks to reduce the cancer burden in Indiana through the development, implementation and evaluation of a comprehensive plan that addresses cancer across the continuum from prevention through end of life.

#### References

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- 2. Indiana State Department of Health. Indiana State Cancer Registry Statistics Report Generator. Accessed online at <a href="http://www.in.gov/isdh/24360.htm">http://www.in.gov/isdh/24360.htm</a> on October 23, 2017.
- 3. CDC, Tobacco-Related Mortality. CDC; 2016. Accessed at <a href="https://www.cdc.gov/tobacco/data\_statistics/fact\_sheets/health\_effects/tobacco\_related\_mort\_ality/index.htm">https://www.cdc.gov/tobacco/data\_statistics/fact\_sheets/health\_effects/tobacco\_related\_mort\_ality/index.htm</a> on June 27, 2017.
- 4. U.S. Department of Health and Human Services. *The Health Consequences of Smoking—50 Years of Progress. A Report of the Surgeon General.* Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on

